

## ABSTRACT

In a method and a device for the signal processing in a hearing aid, in which coefficients of a filter for the frequency-dependent amplitude adaptation of an input signal are adapted in accordance with this input signal, the following steps are carried out:

- Determining coefficients of a compression amplification  $g_m$ , which describe a frequency-dependent adaptation of the input signal in accordance with frequency-dependent signal levels of the input signal,
- determining coefficients of a noise suppression  $a_m$ , which describe a frequency-dependent adaptation of the input signal in accordance with interference noises detected in the input signal, and
- the calculation of the coefficients of the filter (6)  $c_m$  out of the coefficients of the compression amplification  $g_m$  and the coefficients  $a_m$  of the noise suppression.

In this, only a single controllable filter is utilised both for the compression amplification as well as for the noise suppression, and a delay time for the filtering of the input signal is kept short.